

## MATERIAL SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Material Name:** Ryu's flagella stain.  
**Catalogue Number:** ARYU-500  
**Other Names:** Flagella stain  
**Recommended Use:** Used in hospital and pathology laboratories for Flagella staining.

**Supplier Name:** ProSciTech  
**Street Address:** 1/11 Carlton Street, Kirwan, Qld. 4817 Australia  
**Telephone Number:** (07) 4773 9444 **Fax Number:** (07) 4773 2244  
**Emergency Contact:** (07) 4773 9444 8:30am – 5:00pm, Monday to Friday

### SECTION 2 - HAZARDS IDENTIFICATION

**Hazard Classification:** Hazardous according to criteria of NOHSC.  
**Hazardous and/or Dangerous Nature:** HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.  
**Risk Phrases:** R21/22 Harmful in contact with skin and if swallowed.  
R36/38 Irritating to eyes and skin.  
**Safety Phrases:** S1/2 Keep locked up and out of reach of children.  
S7 Keep container tightly closed.  
S26 In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre.  
S28 After contact with skin, wash immediately with plenty of soapy water  
S36/39 Wear suitable protective clothing and eye/face protection.  
S45 In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately and show this container or label.

### SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

**SUBSTANCE:** **Chemical Identity:** Not applicable.  
**Common Name(s):** Not applicable.  
**CAS Number(s):** Not applicable.

#### MIXTURE:

Ingredients	Cas Number(s)	Proportion (%)
TANNIC ACID (Below Cutoff)	1401-55-4	1-10%
PHENOL	108-95-2	1-10%
ALUMINIUM SULFATE (Below Cutoff)	16828-11-8	1-10%
CRYSTAL VIOLET (Below Cutoff)	548-62-9	<1%
ETHANOL	64-17-5	1-10%
WATER	7732-18-5	>60%

### SECTION 4 - FIRST AID MEASURES

**Swallowed:** If swallowed, DO NOT induce vomiting. Give 3 to 4 glasses of water to drink. Seek immediate medical assistance.  
**Eye:** If material is splashed into eyes, immediately, flush with plenty of water for 15 minutes, ensuring eye lids are held open.  
If irritation persists transport to hospital or doctor.  
**Skin:** If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with soap and water. If irritation persists transport to hospital or doctor.  
Additional information for Skin: If product contains less than 25 % phenol, then remove any contaminated clothing, wash thoroughly with soap and water, then methylated spirits. If product contains greater than 25 % phenol, then remove any contaminated clothing, swab repeatedly with glycerin, PEG (polyethylene glycol) or PEG - methylated spirits mixture or if necessary or available methylated spirits alone.  
**Inhaled:** Move victim to fresh air. Apply resuscitation if victim is not breathing.  
**First Aid Facilities:** Eyebath/eyewash & Safety shower.

#### Medical Attention & Special Treatment:

Treat symptomatically.

#### ADDITIONAL INFORMATION:

In case of poisoning, contact Poisons Information Centre. Australia call Tel: 131126

## SECTION 5 - FIRE FIGHTING MEASURES

### Suitable Extinguishing Media:

Use extinguishing media suitable for surrounding fire situation.

### Hazards from Combustion Products:

Decomposes on heating emitting oxides of carbon.

### Precautions for Fire Fighters:

Fire fighters to wear Self-contained breathing apparatus (SCBA) in confined spaces, in oxygen deficient atmospheres or if exposed to products of decomposition. Full protective clothing is also recommended. If safe to do so, move undamaged containers from fire area.

**Hazchem Code:** Not available.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### Emergency Procedures:

#### Containment and clean up:

Material may be slippery when spilt. Walk cautiously. Ventilate area. Wear protective equipment to prevent skin and eye contact, as outlined under personal protection in this MSDS. Bund area using sand or soil - to prevent run off into drains and waterways. Use absorbent (soil, sand, vermiculite or other inert material). Collect and seal in properly labeled containers for disposal.

## SECTION 7 - HANDLING & STORAGE

### Precautions for Safe Handling:

Wear appropriate protective equipment (refer to Section 8). Practice good work hygiene. Only use in a well ventilated area.

### Conditions for Safe Storage:

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition. Store away from oxidizing agents. Keep containers closed, when not using the product. Store in original packages as approved by manufacturer.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### National Exposure Standards:

TANNIC ACID (Below Cutoff)

No Exposure details available

PHENOL

(Worksafe Australia)

[TWA] 1 ppm 4 mg/m<sup>3</sup>

Notices: Sk

References: A

(ACGIH)

[TWA] 5 ppm 19 mg/m<sup>3</sup>

Carcinogen Category: A4

ALUMINIUM SULFATE (Below Cutoff)

No exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC)

CRYSTAL VIOLET (Below Cutoff)

No exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC)

ETHANOL

(Worksafe Australia)

[TWA] 1,000 ppm 1,880 mg/m<sup>3</sup>

References: H

(ACGIH)

[TWA] 1,000 ppm 1,880 mg/m<sup>3</sup>

WATER

### Biological Limit Values:

No biological limit allocated.

### Engineering Controls:

Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate unless the material is heated, reacted or otherwise changed in some type of chemical reaction, then the use of a local exhaust ventilation system is recommended.

### Personal Protective Equipment:

GLOVES: Not normally required, however, if handling large quantities or if the skin is likely to be exposed to

this product over prolonged periods, then the use of PVC or natural rubber is recommended.

**EYES:** Chemical goggles or faceshield to protect eyes.

**RESPIRATORY PROTECTION:** Avoid breathing of vapours/gases. Select and use respirators in accordance with AS/NZS 1715/1716. The use of a dust mask (disposable) or a half-face respirator with P1 filter is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended.

## SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance:</b>	Purple brown liquid.
<b>Odour:</b>	Not available.
<b>pH:</b>	Not available.
<b>Vapour pressure (mm of Hg at 25°C):</b>	25hPa@20oC
<b>Vapour density:</b>	Not available.
<b>Boiling point/range (°C):</b>	Yet to be determined.
<b>Freezing/melting point (°C):</b>	Yet to be determined.
<b>Solubility:</b>	soluble in all proportions
<b>Specific gravity or density:</b>	1L=1.02kg
<b>Flash Point:</b>	Not applicable.
<b>Flammable (explosive) limits:</b>	Not applicable.
<b>Ignition temperature:</b>	Not applicable.
<b>Additional Information:</b>	

## SECTION 10 - STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable under normal conditions of use.
<b>Conditions to avoid:</b>	High temperatures and incompatibles.
<b>Incompatible Materials:</b>	Strong alkalis, acids and oxidizing agents.
<b>Hazardous Decomposition Products:</b>	Emits smoke and fumes when heated to decomposition.
<b>Hazardous Reactions:</b>	Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Exposure and Health Effects:** Prolonged or repeated exposure may lead to irreversible damage to health.

### Ingestion:

Harmful if swallowed.

May cause irritation to mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips and pains in the stomach, which may lead to nausea, vomiting and diarrhea.

### Inhalation:

Mists from the product may cause irritation to the nose, throat and respiratory system with effects including: Cough, discomfort, difficulty breathing and shortness of breath.

### Skin Contact:

Harmful by skin contact.

Will cause irritation to the skin, with effects including; Redness, itchiness, and drying/defatting.

Prolonged or repeated skin contact may lead to dermatitis.

Product may also be absorbed through the skin with resultant toxic effects.

### Eye Contact:

Will cause irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision. These effects are considered to be of a short acting nature and no long term injury is anticipated, if the product is removed promptly.

Prolonged contact may cause severe eye irritation and some form of permanent eye damage may occur.

**Human/Animal data:** Not available.

**Carcinogenicity:** Not available.

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	Not available.
<b>Persistence and degradability:</b>	Not available.
<b>Mobility:</b>	Not available.
<b>Additional Information:</b>	Not available.

**SECTION 13 - DISPOSAL CONSIDERATIONS****Disposal Methods:**

Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Normally suitable for disposal by approved waste disposal agent.

**Special Precautions:****SECTION 14 - TRANSPORT INFORMATION**

**UN Number:** Not regulated.

**UN Proper Shipping Name:** Not regulated.

**Class and Subsidiary risk:** Not regulated.

**Packing Group:** Not regulated.

**Special Precautions for User:** Not available.

**Hazchem Code:** Not available.

**SECTION 15 - REGULATORY INFORMATION**

**Poison Schedule Number:** S5

The material is a S5 Poison and must be stored, handled and used according to the appropriate regulations

**SECTION 16 - OTHER INFORMATION**

Date of preparation of MSDS: August 10

Comments:

The information published in this Material Safety Data Sheet has been compiled from data in various technical publications. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. We reserve the right to revise material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.